IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS LUFKIN DIVISION

AFFINITY LABS OF TEXAS, LLC, \$

Plaintiff, \$

CIVIL ACTION No. 9:08CV164

v. \$

BMW NORTH AMERICA, LLC, ET AL., \$

Defendants. \$

\$

JUDGE RON CLARK

MEMORANDUM OPINION AND ORDER Re: DAMAGES FOR POST-JUDGMENT SALES OF INFRINGING PRODUCTS

Plaintiff Affinity Labs of Texas, LLC ("Affinity") asserted infringement of two patents directed toward a system and method for connecting and integrating a portable electronic device, such as an MP3 player, with a second electronic device, such as a car's sound system. At trial, the jury found that the asserted claims of U.S. Patent No. 7,324,833 ("the '833 patent") and U.S. Patent No. 7,634,228 ("the '228 patent") were infringed. The jury did not find that any of the claims of the patents-in-suit are invalid.

Before the court are Affinity's and the Hyundai/Kia Defendants' post-trial motions [Doc. #532 (Affinity); Doc. #530 (Hyundai/Kia)]. The court held a hearing on January 26, 2011 at which it ruled on several of the issues raised in the parties' briefing, as well as on those motions for judgment as a matter of law ("JMOL") made by the parties at trial on which the

¹ "Hyundai/Kia Defendants" refers to Defendants Hyundai Motor America, Inc., Hyundai Motor Manufacturing Alabama LLC, and Kia Motors America, Inc.

² Affinity filed a corrected version of its post-trial briefing and motions on December 29, 2010. The corrected document is found at [Doc. #534-1].

court had reserved ruling. This order addresses one of the two issues that remain outstanding—the amount of an ongoing royalty for the Hyundai/Kia Defendants' post-judgment sales of infringing products. Based on a careful review of the trial record,³ the applicable law, and the arguments presented, the court finds that a rate of \$14.50 per accused vehicle sold for which there is a corresponding sale of a Hyundai/Kia iPod cable will adequately compensate Affinity for the Hyundai/Kia Defendants' continued infringement.

I. Background

As noted, the patents-in-suit are directed toward a system and method for connecting and integrating a portable electronic device, such as an MP3 player, with a second electronic device, such as a car's sound system. The portable electronic device communicates data such as song, artist, album, and playlist names to the second electronic device, which uses the data to create and display a graphical user interface ("GUI"). The user can then utilize the GUI on the second electronic device to select and play audio files stored on the portable electronic device. The accused Hyundai/Kia products in this case were the stereo systems or "head units" in Hyundai/Kia vehicles, which can connect to an iPod or various other portable electronic devices by way of a Hyundai/Kia iPod cable. [See Tr. at p. 124, II. 5-25 ("[W]hat you have is an iPhone connected to a cable that plugs into an interface device in the car that leads to the car stereo system. And then in the car you have a display device that allows you to go through your music files, select the music that you want to play."); id. at 1240, I. 23 to p. 1241, I. 4 (identifying two components of the accused functionality: head unit and iPod cable).]

³ The transcript of the jury trial will be cited in this order as "Tr. at p. _____, l. ____."

At trial, Affinity's damages expert, Walter Bratic, argued that Affinity should be awarded damages in the form of a running royalty, in the amount of a percentage of the Hyundai/Kia Defendants' sales of infringing head units. [See Tr. at p. 1169, l. 3 to p. 1170, l. 7; id. at p. 1172, l. 12 to p. 1174, l. 1.] The Hyundai/Kia Defendants' damages expert, John Jarosz, opined that the appropriate royalty base was not the number of accused head units sold or the profits from the head units, but rather the number of Hyundai/Kia iPod cables sold. [See Tr. at p. 2190, ll. 4-9.] Mr. Jarosz argued that the appropriate measure of damages would be in the form of a running royalty in the amount of \$3 per Hyundai/Kia iPod cable sold. [See Tr. at p. 2203, ll. 6-13.]

The jury returned a verdict in favor of Affinity, finding that the 2010 Hyundai Sonata, which the parties agreed was representative of the accused Hyundai vehicles with an iPod connection in the armrest, and the 2010 Kia Optima, which the parties agreed was representative of the accused Kia vehicles, infringe the asserted claims of the patents-in-suit. [See Doc. #520, Jury Verdict Form at 2-7.] The jury did not find that any of the asserted claims is invalid. [See Doc. #520 at 11-13.] The jury assessed damages against Hyundai in the amount of \$2,430,065 for sales of accused Hyundai vehicles for which there was also a corresponding sale of a Hyundai/Kia iPod cable. [See Doc. #520 at 14.] The jury assessed damages against Kia in the amount of \$406,472 for sales of accused Kia vehicles for which there was also a corresponding sale of a Hyundai/Kia iPod cable. [See Doc. #520 at 15.] The jury awarded zero dollars in damages for sales of accused Hyundai and Kia vehicles for which there was no

⁴ In the alternative, Mr. Jarosz opined that if the jury decided that the appropriate royalty base was head units rather than cables, damages should be awarded in the amount of \$1 per vehicle sold with an accused head unit. [See Tr. at p. 2223, ll. 10-19.]

corresponding cable sale. [See Doc. #520 at 14-15.] The court has entered a separate order denying Affinity's request for an award of past damages for those sales. [See Doc. #548.]

II. Ongoing Royalty

At the post-trial hearing on January 26, 2011, after applying the traditional four-factor test, *see eBay v. MercExchange, LLC*, 547 U.S. 388, 391, 126 S. Ct. 1837, 1839 (2006), the court denied Affinity's request for a permanent injunction against the Hyundai/Kia Defendants. The court is therefore presented with the question of whether an ongoing royalty should be imposed. An ongoing royalty should not be awarded "as a matter of course" when injunctive relief is not granted. *Paice LLC v. Toyota Motor Corp.* (*Paice II*), 504 F.3d 1293, 1314-15 (Fed. Cir. 2007).

In most cases, where the district court determines that a permanent injunction is not warranted, the district court may wish to allow the parties to negotiate a license amongst themselves regarding future use of a patented invention before imposing an ongoing royalty. Should the parties fail to come to an agreement, the district court could step in to assess a reasonable royalty in light of the ongoing infringement.

Id. at 1315.

Prior to the post-trial hearing, the court had directed Affinity and the Hyundai/Kia Defendants to meet and confer in good faith to see if they could agree on an ongoing royalty in the event that the court denied permanent injunctive relief. [See Tr. at p. 2779, l. 12 to p. 2780, l. 15.] The parties did so but were unable to come to any agreement. At the post-trial hearing, after the court issued its ruling denying Affinity's request for a permanent injunction, the court asked the parties if they would like some additional time to meet in an attempt to negotiate a license. [See Post-trial Hr'g Tr. at p. 111, l. 5 to p. 112, l. 24.] The parties indicated that they did not believe additional negotiation attempts would be fruitful and that they wished the court to

resolve the issue of the amount of any ongoing royalty. [See Post-trial Hr'g Tr. at p. 113, ll. 4-11.]

A. Standard for Calculation of an Ongoing Royalty

1. Calculation of a pre-suit royalty using the Georgia-Pacific factors.

Calculation of a reasonable royalty for pre-suit infringement is typically grounded on the fifteen factors set out in, and the cases expounding upon, *Georgia-Pacific Corp. v. U.S. Plywood Co.*, 318 F. Supp. 1116 (S.D.N.Y. 1970). The *Georgia-Pacific* approach asks the fact-finder to determine the royalty upon which the parties would have agreed at a hypothetical negotiation taking place just before infringement began. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1324-25 (Fed. Cir. 2009). The fact-finder must determine the amount that a willing licensor and willing licensee would have agreed was a reasonable royalty for allowing sales of products assumed to infringe patent claims assumed to be valid. *Id.* Thus, just as in other areas of economic analysis, the parties' experts are required to ground their opinions on assumed facts—in this case, infringement of a valid patent and the existence of a willing licensee and licensor. *See* Campbell R. McDonnell, *Economics* 7 (8th ed. 1981); Roger N. Waud, *Economics* 8-9 (2d ed. 1983); *see also Black's Law Dictionary* 143 (9th ed. 2009) (an "assumption" is "1. A fact or statement taken as true or correct").

Requiring experts to base their conclusions on common, fixed assumptions may seem artificial, but courts have utilized the "hypothetical negotiation" technique for many years in

⁵ It is self-evident that changing the assumptions of an economic analysis will change the results. But failure to impose some limit on the variables an expert may consider would result in a useless exercise in which, for a fee, a plaintiff's expert expounds on a punitive royalty rate based on the absolute unwillingness of his client to license the patents-in-suit to the defendant. That is, in fact, what sometimes happens at post-trial hearings on ongoing royalty rates.

cases involving the acquisition of property. *See, e.g., Almota Farmers Elevator & Warehouse Co. v. United States*, 409 U.S. 470, 473-74, 93 S. Ct. 791, 794 (1973) (in eminent domain context, owner is to be put in same position monetarily as he would have been but for the taking, and "[t]o determine such monetary equivalence, the Court early established the concept of 'market value': the owner is entitled to the fair market value of his property at the time of the taking. And this value is normally to be ascertained from 'what a willing buyer would pay in cash to a willing seller.'" (citations omitted)); *City of N.Y. v. Sage*, 239 U.S. 57, 61, 36 S. Ct. 25, 27 (1915) ("[W]hat the owner is entitled to is the value of the property taken, and that means what it fairly may be believed that a purchaser in fair market conditions would have given for it in fact,—not what a tribunal at a later date may think a purchaser would have been wise to give . . . ").

2. The *Georgia-Pacific* factors can also be the starting point for calculation of a post-judgment royalty.

The authority for awarding prospective relief in the form of an ongoing royalty flows from 35 U.S.C. § 283, which permissively allows the entry of injunctions "in accordance with the principles of equity." *See Paice II*, 504 F.3d at 1314, 1315 n.16. "Pre-suit and post-judgment acts of infringement are distinct, and may warrant different royalty rates given the change in the parties' legal relationship and other factors." *Paice II*, 504 F.3d at 1317 (Rader, J., concurring). The court must keep in mind the importance of providing "a concise but clear explanation of its reasons for the fee award." *Amado v. Microsoft Corp.*, 517 F.3d 1353, 1362 (Fed. Cir. 2008) (quoting *Paice II*, 504 F.3d at 1315).

One method of calculating an ongoing royalty for post-judgment infringement that lends itself to a clear explanation is to first calculate the amount of a reasonable ongoing royalty based

to the extent possible on market factors and the assumption of a willing licensor and willing licensee, without consideration of the willful nature of any ongoing infringement. The court may then determine whether, and by how much, this reasonable "market" royalty should be increased to account for the fact that ongoing infringement will be willful.

This approach allows the court to take full advantage of the evidence presented by the parties' damages experts at trial and the jury's findings with respect to a pre-suit royalty. The jury's findings of infringement and no invalidity merely confirm the experts' assumptions of those facts. Thus, the trial testimony and jury findings with respect to past damages can provide a basis for calculating a market royalty for any ongoing infringement.⁶ Further, the approach of first calculating a reasonable market royalty and then determining whether and by how much that amount should be enhanced tracks the statutory framework established by Congress for the calculation of past damages under 35 U.S.C. § 284.⁷

3. Enhancement of the post-judgment reasonable market royalty serves public interests and protects the patentee.

The public benefits of protecting intellectual property have long been recognized in American law. The U.S. Constitution grants Congress the power "[t]o promote the Progress of

⁶ If there have been any changes in the market between the date of the hypothetical negotiation and the date of trial, a damages expert may include in his or her pre-suit calculations every advantageous change in profits, sales, and other conditions under the "book of wisdom" rubric. *See Lucent Techs.*, 580 F.3d at 1333-34 (citing *Sinclair Ref. Co. v. Jenkins Petroleum Process Co.*, 289 U.S. 689, 698, 53 S. Ct. 736, 739 (1933)). To the extent that some new fact or change was not considered under the "book of wisdom," evidence of such changes can be presented post-trial.

⁷ Congress first provided that "the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer." 35 U.S.C. § 284. Congress then provided that "the court may increase the damages up to three times the amount found or assessed." *Id.*

Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. Const. art. I, § 8, cl. 8. Providing for the possibility of injunctive relief and enhanced damages for patent infringement are two of the ways that Congress has chosen to implement this power. *See* 35 U.S.C. §§ 283, 284.

The private benefit of a patent to its owner is directly related to the protection it offers, i.e. the disincentives to infringement it provides. Without the risk of a post-judgment enhancement, a defendant would be encouraged to bitterly contest every claim of patent infringement, because in the end, only a reasonable royalty would be imposed and there would essentially be no downside to losing. *See Paice LLC v. Toyota Motor Corp.* (*Paice III*), 609 F. Supp. 2d 620, 628 (E.D. Tex. 2009).

Where a court decides not to grant an injunction after a finding of infringement, any determination of an ongoing royalty should consider an enhancement that takes into account these important public and private interests. Enhancement of pre-suit damages does not normally occur absent a finding of willfulness. *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 858 (Fed. Cir. 2010). Following a jury verdict and entry of judgment of infringement and no invalidity, a defendant's continued infringement will be willful absent very unusual circumstances. Keeping in mind that there were reasons for not granting an injunction, the court should consider how much the reasonable market royalty should be enhanced to substantially reduce, or even eliminate, the defendant's marginal profit from the infringing activity. General deterrence of infringing activity is also a factor to be considered.

B. Determining the Amount of an Ongoing Royalty in This Case

1. The court starts by calculating a reasonable market royalty.8

(a) Vehicles for which there is a corresponding sale of a Hyundai/Kia iPod cable

The parties agree that the jury's past damages award equates to a royalty rate of \$11 per vehicle sold for which there is a corresponding sale of a Hyundai/Kia iPod cable, and that this \$11 rate for past damages should be the starting point in the analysis of an appropriate ongoing royalty rate. [See Doc. #534-1 at 11-12 (arguing that \$11 rate should be increased to account for willfulness, but not asserting any changes in the market from date of original hypothetical negotiation); Doc. #530 at 12-14 (arguing that several market factors indicate \$11 is reasonable market royalty going forward).]

Depending on the damages instructions and the evidence presented at trial, dividing the total amount of the jury's award for past damages by the number of infringing units may not always equate to a reasonable per unit royalty rate. But in this case, the jury was instructed to answer the damages questions in the form of a reasonable royalty. [See Doc. #520 at 14-15.] And, the \$11 per unit rate calculated by the parties based on the jury's answers falls between the damage amounts proposed by the parties' experts and is supported by the evidence presented at trial. Other than the parties' changed legal status, there do not appear to be any significant

⁸ In this case no request was made to submit to the jury a question on future damages, and there was no indication from the damages experts of the existence of any recent market factors that were not accounted for in their past damages analyses. Accordingly, the court did not submit the issue of an ongoing royalty to the jury for an advisory verdict.

⁹ As noted above, the Hyundai/Kia Defendants' damages expert opined that a reasonable royalty for past damages would be \$3 per Hyundai/Kia iPod cable sold. [*See* Tr. at p. 2203, ll. 6-13.] Although Affinity's damages expert opined that it was appropriate to include all accused head units in the royalty base, he offered an alternative opinion in which he limited the

economic or commercial circumstances that have changed since the original hypothetical negotiation date. [See Doc. #530-19, Jarosz Decl. ¶ 7.] Therefore, there is no need to review the damages evidence in detail. The court agrees with the parties that a rate of \$11 per vehicle sold for which there is a corresponding sale of a Hyundai/Kia iPod cable is the appropriate starting point for determining the ongoing royalty award.

(b) Vehicles for which there is no corresponding sale of a Hyundai/Kia iPod cable

Affinity argues, as it did with respect to past damages, that it should be awarded an ongoing royalty for accused vehicles sold for which there is no corresponding cable sale. [See Doc. #534-1 at 13.] For the reasons set out in the court's order denying an award of past damages for those sales [Doc. #548], the court has adopted the view of the case reflected by the jury's answers, namely that without the Hyundai/Kia iPod cable, certain claim limitations are not met. See Griffin v. Matherne, 471 F.2d 911, 915 (5th Cir. 1973) (if view of case exists that makes jury's answers consistent, court must adopt that view). Therefore, the court will not award an ongoing royalty for sales of accused vehicles for which there is no corresponding cable sale.

(c) Alleged availability of generic after-market cables

One issue that arose at trial was the alleged availability of generic after-market cables and whether such cables could be substituted for the Hyundai/Kia iPod cable. Because Affinity did not timely disclose evidence of after-market cables purchased from third parties, the court excluded such evidence at trial. [See Final Pretrial Hr'g Tr. at p. 23, 1. 4 to p. 24, 1. 10; Tr. at

number of head units in the royalty base to only those vehicles sold for which there was also a corresponding Hyundai/Kia iPod cable sale. [*See* Tr. at p. 1172, ll. 12-23.] In that scenario, using his number of 265,000 Hyundai/Kia iPod cables sold, his opinion that Affinity should receive \$4,400,000 in damages equates to \$16.60 per vehicle sold with a corresponding cable sale.

p. 206, ll. 2-16; *id.* at p. 234, l. 5 to p. 241, l. 13; *id.* at p. 1182, l. 25 to p. 1183, l. 6.; *id.* at p. 1275, l. 12 to p. 1280, l. 9.] As part of its ongoing royalty argument, Affinity now attempts to overcome the limitations placed on the evidence that was admitted at trial by submitting new evidence in the form of a declaration by its president, Harlie Frost, concerning the alleged after-market cables. [*See* Doc. #532-1, Frost Decl. ¶ 8.]

Mr. Frost states that he has purchased a third-party cable from Amazon that "appeared to provide the identical accused functionality as the Hyundai/Kia cable." [Doc. #532-1 ¶ 8 (emphasis added).] He states that "although highly similar to the Hyundai/Kia cable, there are detectable cosmetic differences." [Doc. #532-1 ¶ 8 (emphasis added).] He also states that he purchased another third-party cable from Ebay that "appears to work the same as the Hyundai/Kia cable as well and again has cosmetic differences from the Hyundai/Kia cable." [Doc. #532-1 ¶ 8.] Affinity asserts that this post-trial evidence should be considered by the court in its ongoing royalty analysis, arguing that if the court does not consider it to assess an ongoing royalty for sales of vehicles with no corresponding Hyundai/Kia iPod cable sale, the court should at least take into account the existence in the market of generic cables when analyzing the appropriate amount of an ongoing royalty for vehicles sold with a corresponding Hyundai/Kia iPod cable sale. [See Post-trial Hr'g Tr. at p. 119, 1. 11 to p. 121, 1. 6.]

In the first place, Mr. Frost was not shown to be qualified to render a technical opinion on the operation of the generic cables at issue. His declaration simply states that he is an attorney who has been involved in intellectual property management and business development for various companies. [See Doc. #532-1 ¶ 2-3.] Even assuming that he is marginally technically qualified, his statements regarding the operation of the third-party cables he purchased are *ipse*

dixit conclusions, carefully couched in the equivocal terms emphasized above—"appeared to provide," "highly similar," and "appears to work the same."

As noted, the court excluded as untimely disclosed certain evidence that Affinity wished to present at trial concerning after-market cables. ¹⁰ Any evidence attached to the earlier motions and papers dealing with that disclosure issue is not before the court at the post-trial stage, any more than evidence attached to a denied summary judgment motion is part of the trial record. All that Affinity has presented post-trial regarding the after-market cables is Mr. Frost's declaration. Even setting aside the prohibition against untimely-disclosed evidence, this declaration does not provide a sufficient basis to justify an increase of the ongoing royalty rate for vehicles sold either with or without a corresponding Hyundai/Kia iPod cable sale.

(d) Conclusion

The court will accept the agreement of the parties that \$11 per unit is the starting point for calculation of an ongoing royalty for sales of vehicles for which there is a corresponding sale of a Hyundai/Kia iPod cable. In keeping with the view of the case reflected by the jury's answers, the court will not award an ongoing royalty for sales of accused vehicles for which there is no corresponding Hyundai/Kia iPod cable sale. Nor will the court use Mr. Frost's declaration regarding after-market cables as a basis for increasing the royalty rate for sales of vehicles with a corresponding Hyundai/Kia iPod cable sale.

[&]quot;A party that fails to disclose any information required to be disclosed by any order of this court or the Patent Rules of this court will not, unless such failure is harmless, be permitted to use such evidence at trial, hearing or in support of a motion." [Doc. #88, Order Governing Proceedings at 5; *see also* Doc. #195, Scheduling Order at 6 (same).]

2. The court next considers whether, and by how much, the reasonable market royalty should be enhanced to account for the willful nature of the ongoing infringement.

The Hyundai/Kia Defendants originally asserted that no premium or enhancement should be awarded, and argued that an appropriate ongoing royalty rate would be the same rate found by the jury for past damages—\$11 per vehicle sold for which there is a corresponding cable sale. [See Doc. #530 at 12-15.] At the post-trial hearing, the Hyundai/Kia Defendants recognized that awarding an ongoing royalty at the same rate found by the jury for past damages would not account for the parties' changed legal status. [See Post-trial Hr'g Tr. at p. 125, ll. 3-14.] They asserted that a 25% premium on the royalty rate found by the jury would be reasonable and appropriate. [See Post-trial Hr'g Tr. at p. 125, l. 15 to p. 126, l. 13.] Affinity notes that other courts in this district have commonly awarded post-trial premiums in the range of 33% to 50% of the royalty rate for past damages found by the jury, and asserts that a 33% increase would be appropriate in this case. [See Doc. #534-1 at 11-12.]

The court will not simply pick an arbitrary percentage or a percentage based on what other courts have awarded in different cases. Of course, it is not possible to precisely calculate an exact amount that reduces the defendant's profit motive to infringe and serves to deter infringing conduct in general. However, as jurors are regularly instructed, damages need only be established with reasonable certainty, and need not be calculated with mathematical precision. *See Ryco, Inc. v. Ag-Bag Corp.*, 857 F.2d 1418, 1428 (Fed. Cir. 1988). Any doubts regarding the damages amount should be resolved against the infringer. *Id.*

Although the appropriate amount of enhancement cannot be precisely calculated, certain factors can be considered and weighed. Given the willful nature of the ongoing infringement and

the fact that a new lawsuit could potentially result in an award of treble damages, the court will consider the factors traditionally taken into account when determining whether to enhance a past damages award upon a finding of willfulness. *See Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826-27 (Fed. Cir. 1992). Additionally, the court will consider the costs that the Hyundai/Kia Defendants will avoid by paying a judicially-determined royalty in lieu of defending future litigation directed toward their ongoing infringement. Finally, the court will consider the public interest in protecting the patent system as weighed against any other public interests that should be taken into account based on the facts of this case.

(a) Willfulness factors

The Hyundai/Kia Defendants argue that because there are pending reexaminations of both patents-in-suit in which the PTO has rejected all claims asserted against them, their ongoing infringement should not be considered willful at this point. [See Doc. #530 at 14-15, 15 n.7.] The court rejects the contention that the Hyundai/Kia Defendants' continued infringement is not willful merely because the asserted claims of the patents-in-suit have been rejected in a pending reexamination. Unless and until the jury's verdict is nullified by reversal of this court's judgment on appeal, or the reexamination rejections have become final, the Hyundai/Kia Defendants are adjudged infringers. The court has detailed its reasons for denying the Hyundai/Kia Defendants' various motions for JMOL. [See Tr. at p. 2491, l. 11 to p. 2492, l. 9; id. at p. 2503, ll. 2-14; id. at p. 2781, l. 2 to p. 2783, l. 2; id. at p. 2783, l. 3 to p. 2789, l. 17; id. at p. 2794, ll. 3-5; Post-trial Hr'g Tr. at p. 40, l. 10 to p. 41, l. 4; id. at p. 44, l. 19 to p. 45, l. 16; id. at p. 45, l. 17 to p. 52, l. 17; id. at p. 116, ll. 1-15.] Upon entry of judgment, their continued voluntary and intentional manufacture and sale of the accused products is willful.

The Federal Circuit has identified nine factors to assist trial courts in evaluating the degree of an infringer's culpability for the purpose of determining whether to award enhanced damages upon a finding of willful infringement: (1) whether the infringer deliberately copied the ideas or design of another; (2) whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed; (3) the infringer's behavior as a party to the litigation; (4) the defendant's size and financial condition; (5) the closeness of the case; (6) the duration of defendant's misconduct; (7) any remedial action by the defendant; (8) the defendant's motivation for harm; and (9) whether the defendant attempted to conceal its misconduct. *See Read*, 970 F.2d at 827.

The first *Read* factor is neutral, as there has been no evidence of deliberate copying in this case. [*See* Doc. #266 at 2 (Defendants were unaware of the '833 patent until suit was filed); Doc. #323 at 5 ('228 patent did not issue until December 2009 and was added to suit at that time).]

The second *Read* factor addresses whether the infringer investigated the scope of the patent and formed a good faith belief that the patent was invalid or not infringed. There was evidence at trial that the Hyundai/Kia Defendants obtained and relied upon an opinion of counsel that they did not infringe the patents-in-suit and that the patents-in-suit were not valid. [*See* Tr. at p. 2159, l. 8 to p. 2166, l. 6.] While this would be relevant to the Hyundai/Kia Defendants' culpability with respect to pre-verdict infringement, it carries little to no weight with respect to ongoing post-judgment infringement now that a jury has found that the Hyundai/Kia Defendants do infringe and has failed to find that any of the asserted claims are invalid. The court finds that

the second *Read* factor exerts an upward influence on the amount of the enhancement in light of the fact that the Hyundai/Kia Defendants are now adjudged infringers.

The third *Read* factor, the infringer's behavior as a party to the litigation, is neutral. The Hyundai/Kia Defendants behaved professionally throughout the litigation, and the court does not find that the amount of the enhancement should be increased due to any litigation-related behavior.

The fourth *Read* factor, the defendant's size and financial condition, supports a higher enhancement amount under the facts of this case. The Hyundai/Kia Defendants are large companies, especially in comparison to Affinity. [*See* Tr. at p. 212, Il. 19-21 (Affinity is two-person company).] There has been no indication that the Hyundai/Kia Defendants are in a precarious financial condition. Large profitable companies like the Hyundai/Kia Defendants are not likely to be deterred by a per unit enhancement amount that is low in absolute terms, even if the amount sounds high when expressed as a percentage. Trebling the \$11 per unit reasonable market royalty, as would be permitted in the case of a willfulness enhancement on past damages, would result in an ongoing royalty rate of only \$33 per unit. Compared to the profit that the Hyundai/Kia Defendants earn on each vehicle or entertainment system, ¹¹ this would not be a per se unreasonable amount for ongoing acts of willful infringement.

The fifth *Read* factor addresses the closeness of the case. With the exception of the "mount" limitation, which is present in only some of the asserted claims, this did not appear to

Although the Hyundai/Kia Defendants' damages expert testified that the companies' gross profits on sales of the Hyundai/Kia iPod cable are \$6 per cable, and net profits are only \$0.90 per cable [Tr. at p. 2210, ll. 18-21], Affinity's damages expert testified that for each accused vehicle sold, the profit attributable to the accused system is approximately \$38 [Tr. at p. 1169, ll. 15-17].

be a particularly close case with respect to infringement. It was a closer case with respect to some of the invalidity defenses. However, as with the second *Read* factor, this factor carries less weight when evaluating the culpability of ongoing post-judgment infringement.

Although the Hyundai/Kia Defendants will no doubt continue to pursue their noninfringement and invalidity arguments on appeal, their products are now adjudged to infringe each of the asserted claims. The court has detailed its reasons for denying the Hyundai/Kia Defendants' various motions for JMOL. On appeal, the Hyundai/Kia Defendants will have to prevail on noninfringement or invalidity as to each asserted claim. Given the deference normally afforded to a jury's verdict, and the burden to establish invalidity by clear and convincing evidence, it is difficult to say that even while the appeal is pending the case is a close one.

The sixth and seventh *Read* factors are the duration of defendant's misconduct, and any remedial action by the defendant. It is hard to predict the exact duration of the Hyundai/Kia Defendants' ongoing infringement. The duration could be short, if they are successful in quickly designing around the asserted claims. On the other hand, the ongoing infringement could potentially continue for the life of the patents-in-suit. The Hyundai/Kia Defendants argue that it is unlikely they will still be using the infringing technology long into the future [*see* Doc. #530 at 12-13]; that they have developed a modified cable that does not infringe at least some of the asserted claims [*see* Doc. #530 at 13]; and that they can compete in the marketplace with noninfringing AUX-only or USB-only connections [*see* Doc. #530 at 13].

While remedial action and a shorter duration of ongoing infringement would decrease the Hyundai/Kia Defendants' culpability and the egregiousness of their conduct, the fact that they may be able to quickly cease their infringing conduct actually supports imposition of a higher

enhancement. A higher ongoing royalty will not be especially harmful if the technology at issue will be obsolete in the near future. Further, the Hyundai/Kia Defendants will be quickly freed of the obligation to pay ongoing royalties should they choose to compete in the marketplace using noninfringing alternatives such as AUX-only or a modified design-around cable. On the other hand, should the Hyundai/Kia Defendants choose to continue their ongoing infringement for the life of the patents, despite the alleged availability of noninfringing alternatives, their culpability level would be high, which would support a higher enhancement.

The eighth *Read* factor is neutral, as there is no indication that the Hyundai/Kia Defendants' infringing conduct is motivated by a desire to drive Affinity out of business or to otherwise harm Affinity. Likewise, the ninth *Read* factor is neutral, as there has been no evidence of any attempts by the Hyundai/Kia Defendants to conceal their misconduct.

(b) Costs saved by avoiding future litigation

When considering how much the post-judgment market royalty should be enhanced, it is reasonable to examine the costs that the Hyundai/Kia Defendants avoid by the imposition of an ongoing royalty. As of 2009, the cost of defending against a patent infringement suit was estimated to be about \$3 million, with an additional \$2 million added to take a case through appeal. Richard D. Margiano, *Cost and Duration of Patent Litigation, Managing Intell. Prop.* (Feb. 1, 2009), http://www.managingip.com/Article/2089405/Cost-and-duration-of-patent-litigation.html.

The Hyundai/Kia Defendants have represented that because this field of technology evolves quickly, they are likely to transition to other non-infringing forms of iPod connectivity in their vehicles within a few years. [See Doc. #530 at 12-13.] In the few years between the

issuance of the patents-in-suit and the trial of this case, the Hyundai/Kia Defendants sold approximately 257,867 to 265,000 accused vehicles with a corresponding Hyundai/Kia iPod cable sale. [See Tr. at p. 1172, ll. 19-20 (Affinity's damages expert estimated 265,000 cables sold through date of trial); id. at p. 2190, ll. 10-19 (Hyundai/Kia Defendants' damages expert estimated 257,867 cables sold through date of trial).] Although only a rough estimate, if the Hyundai/Kia Defendants were to continue their sales at approximately the same rate for another two to three years until they cease use of the infringing technology, the \$5 million saved by avoiding a second lawsuit could amount to a savings of approximately \$19 per infringing system.

Additionally, the Hyundai/Kia Defendants will avoid certain intangible costs by paying a judicially-determined ongoing royalty. Their engineers and managers will not be distracted by any press or other publicity concerning future litigation, and annual reports will not have to include notations about ongoing litigation.

(c) Balance of public interests

Finally, the court weighs the public interest in protecting the patent system as balanced against other societal interests and goals. There is a strong interest in the promotion of respect for the patent laws and the deterrence of infringing activities in general. In this case, there are no substantial countervailing public concerns. The accused entertainment systems are not some life-saving medical technology or the like. Because there is no strong public interest in the ongoing infringing production of the accused products, the balance of public interests weighs in favor of a higher enhancement amount as a general deterrent to infringement.

(d) An enhancement of thirty-three percent is justified

Although an ongoing royalty is a form of equitable relief flowing from 35 U.S.C. § 283, some guidance is offered by 35 U.S.C. § 284, which governs the award of past damages. Section 284 indicates that Congress considered it reasonable to increase the amount of past damages to up to three times the amount of "adequate" compensatory damages upon a finding of willful infringement. *Read* willfulness factors (2), (4), (5), (6), and (7) support imposition of an ongoing royalty greater than the reasonable post-judgment market royalty of \$11 per vehicle sold with a corresponding cable sale. A rough estimate indicates that the Hyundai/Kia Defendants may save approximately \$19 per infringing system by avoiding future litigation concerning their continued infringement. The balance of public interests also weighs in favor of an enhancement.

While the foregoing analysis indicates that an argument might have been made for a higher amount, Affinity states that a "conservative" enhancement of 33% will adequately account for the willful nature of the ongoing infringement. [See Doc. #534-1 at 12.] This would result in an ongoing royalty rate of \$14.50 per accused vehicle sold for which there is a corresponding sale of a Hyundai/Kia iPod cable. Not being inclined to award more than requested, and based on the evidence and reasons stated above, the court finds this number to be reasonable.

III. Conclusion

The court will assess an ongoing post-judgment royalty at the rate of \$14.50 per accused vehicle sold for which there is a corresponding sale of a Hyundai/Kia iPod cable.

So ORDERED and SIGNED this 28 day of March, 2011.

Ron Clark, United States District Judge

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